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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,734	09/09/2003	Antoni Kozlowski	SHE0073.00	3893

21968 7590 08/18/2005

NEKTAR THERAPEUTICS
150 INDUSTRIAL ROAD
SAN CARLOS, CA 94070

EXAMINER

TRUONG, DUC

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,734

Applicant(s)

KOZLOWSKI, ANTONI

Examiner

Duc Truong

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54, 82, 84-85, 90, 94, 155-185 is/are pending in the application.
- 4a) Of the above claim(s) 173-175, 177 and 179-183 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54, 82, 84, 85, 90, 94, 155-172, 176, 178, 184 and 185 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>062005 and 080904</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant elects Group I without traverse with species III-A in claim 37 on 6/15/05.

Note that new claims 155-185 have been added in that claims 155-172 and 184-185 are included in Group I. Therefore, claims 37-45, 155-172 and 184-185 are read on species III-A, as elected.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-54, 82, 84-85, 90, 94, 155-172, 176, 178, and 184-185 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shearwater Corporation or Vandoorne et al, both of record on 1449.

The Shearwater Corporation discloses mPEG-Acetaldehyde Diethyl Acetal which is read on the claimed acetal of claims 167 and related claims.

The reference further discloses Mpeg2-Aldehyde which is read on the claimed formula III-A in claim 37.

The reference further discloses PEG-Propionaldehyde which is read on the claimed general formula I in claim 1.

In the formula III-A in claim 37, if $a=0$, $b=0$ and $z'=1$, said claim is read on the formula (3) on page 272 of the Vandoorne reference.

The disclosures of the references differ from the instant claims in that they do not disclose the claimed formula I in claim 1 nor formula III-A in claim 37 with so many

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variations. However, the references do disclose specific formulae which are included in the claimed formulae. Therefore, it would have been obvious to one of ordinary skill in the art to select reactants under similar conditions to form the products, a water soluble polymer, of the claimed formulae since they have been shown to be effective in a similar system and thus would have been expected to provide adequate results. There is no showing of unexpected results derived from said selections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DUCTRUONG
PRIMARY EXAMINER

10/659,734

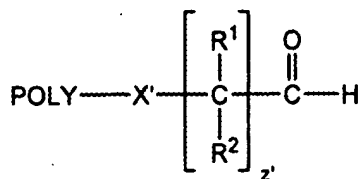
Atty Dkt No. 6800-0073
 USSN: 10/659,734
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original). A water-soluble polymer having the structure:



I

wherein:

POLY is a water-soluble polymer segment;

X' is a linker moiety;

z' is an integer from 1 to about 21;

R¹, in each occurrence, is independently H or an organic radical selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, aryl, and substituted aryl;

R², in each occurrence, is independently H or an organic radical selected from the group consisting of alkyl, substituted alkyl, alkenyl, substituted alkenyl, alkynyl, substituted alkynyl, aryl, and substituted aryl,

and further wherein the following apply:

-when POLY is linear:

(a) the total number of carbonyls present in said polymer is 0 or 2 or greater except when X' comprises one or more contiguous (-CH₂CH₂O-) segments,

(b) and further wherein X' is oxygen or comprises at least one (-CH₂CH₂O-) segment and z' is from 2 to 12, then at least one of R¹ or R² in at least one occurrence is an organic radical as defined above or said polymer is heterobifunctional, where POLY comprises a reactive group at one terminus that is not hydroxy, and

-when POLY is branched:

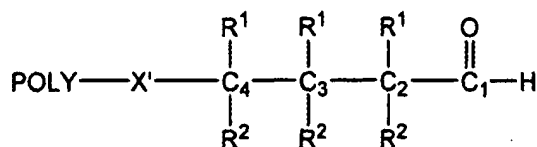
(c) either (i) at least one of R^1 or R^2 in at least one occurrence is an organic radical as defined above or (ii) X' includes $-(CH_2CH_2O)_b-$ where b is from 1 to about 20 in the instance where POLY comprises a lysine residue,

(d) and further wherein said POLY has 2 polymer arms, then neither polymer arm comprises oxygen as the only heteroatom in the instance where POLY comprises "C-H" as a branch point.

2. (Original). The polymer of claim 1, wherein z' ranges from 2 to 21.

3. (Original). The polymer of claim 1, wherein z' ranges from 3 to 12.

4. (Original). The polymer of claim 1, having the structure:



I-A

wherein POLY, X' , each R^1 , each R^2 and R^3 are as previously defined.

5. (Original). The polymer of claim 4, wherein the R^1 attached to C_2 is alkyl, and all other R^1 and R^2 variables are H.

6. (Original). The polymer of claim 5, wherein the R^1 attached to C_2 is lower alkyl.

7. (Original). The polymer of claim 6, wherein the R^1 attached to C_2 is selected from the group consisting of methyl, ethyl and propyl.

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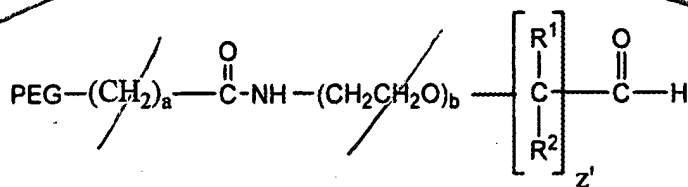
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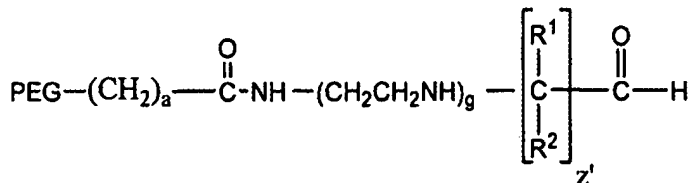
PATENT

group consisting of hydroxy, amino, ester, carbonate, aldehyde, alkenyl, acrylate, methacrylate, acrylamide, sulfone, thiol, carboxylic acid, isocyanate, isothiocyanate, hydrazide, maleimide, vinylsulfone, dithiopyridine, vinylpyridine, iodoacetamide, alkoxy, benzyloxy, silane, lipid, phospholipid, biotin, and fluorescein.

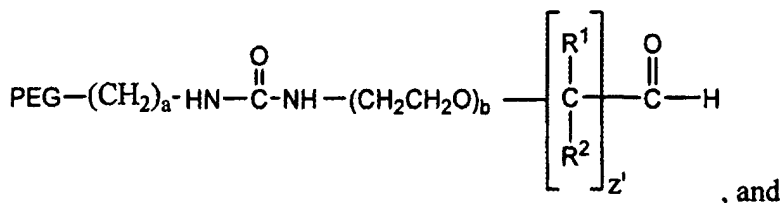
37. (Original). The polymer of claim 1, having a structure selected from the group consisting of:



III-A

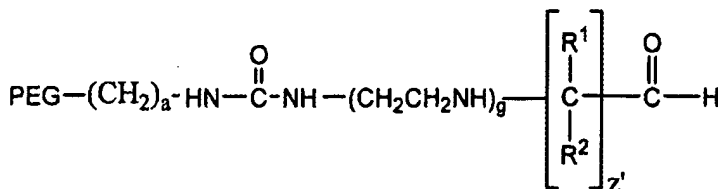


IV-A



, and

III-C



IV-C

wherein PEG is poly(ethylene glycol), b and g are each independently 0 to 20, a is 0 to 6, and the remaining variables are as defined in claim 1.